



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY TITLE V PERMIT

COMPANY: *Mojave Pipeline Operating Company*
FACILITY: *TOPOCK COMPRESSOR STATION*
PERMIT #: *1000194*
DATE ISSUED: *May 30, 1998*
EXPIRY DATE: *May 30, 2003*

SUMMARY

This operating permit is issued to Mojave Pipeline Operating Company (MPOC), the Permittee, for operation of their Topock Compressor Station located at 5499 W. Needle Mountain Road near Topock, Arizona (from Needle Mountain Road exit off Highway 95, go half mile north).

MPOC provides natural gas transportation services for natural gas suppliers and end users through a natural gas transportation system which consists of piping systems, metering stations and a natural gas compressor station. The gas compressor station provides the compression necessary to transport the natural gas through the piping network. At the Topock Compressor Station, natural gas compression is accomplished using **three natural gas-fired Cooper Bessemer reciprocating "clean burn" Internal Combustion (IC) engines** each driving a reciprocating compressor unit. Two additional engines were permitted under an Installation permit. However, a BACT analysis should be determined again prior to installation. Primary electric power for the facility is produced by either of the **two electrical generators** each driven by a **natural gas-fired Caterpillar reciprocating engine**. The IC engines are designed to emit low concentrations of emissions. No external air pollution control equipment are installed on any of the reciprocating engines. The facility is permitted to operate 24 hours a day and 365 days a year. This facility has been partly automated and is attended during the day shift. All records relating to this permit will be kept at the Topock Compressor Station.

All terms and conditions of this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA). This permit cites only the current state rules. The rules in the State Implementation Plan (SIP) have been renumbered but the language in the current rules is either more stringent or is the same. Only Rule R9-3-527.C. has been included in this permit from the SIP because this rule was substantially different. A copy of a rule conformity test between the current rules and the SIP is attached with the technical analysis.

Table 1 summarizes the requirements for operation of equipment emitting emissions in significant quantities. Activities generating insignificant quantities of emissions are listed in Attachment "E". The total potential emissions emitted from this facility (excluding insignificant activities) are as follows. These figures are for information purposes only and are not an enforceable limits.

| Pollutants | Nitrogen Oxides | Carbon Monoxide | Volatile Organic Compounds | Formaldehyde | Sulfur Dioxide | Particulate Matter |
|------------|-----------------|-----------------|----------------------------|--------------|----------------|--------------------|
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|--|--------|--------|-------|------|------|------|
| Emissions (Tons Per Year) | 375.81 | 483.64 | 113.4 | 6.46 | 1.10 | 4.66 |
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TABLE 1 : Summary of Permit Requirements

| Emission Unit | Pollutants Emitted | Control Measure | Emission Limits / Standards | Monitoring /Record Keeping | Reporting | Testing Frequency/ Methods |
|--|-----------------------|-----------------------------|--|--|--|--|
| <u>POINT SOURCES</u> | | | | | | |
| P1. Cooper Bessemer reciprocating "clean burn" IC engine Stack 1 P2. Cooper Bessemer reciprocating "clean burn" IC engine Stack 2 P3. Cooper Bessemer reciprocating "clean burn" IC engine Stack 3 (Fuel -Natural Gas) [Installation Permit, R18-2-719] | PM | No controls installed | $E = 1.02 Q^{0.769}$ lbs/hr per engine | -Daily lower heating value of fuel OR -Maintain copy of that part of FERC-approved Tariff agreement where gross heating value s- hould be greater than 970 BTU/cubic foot | Any change in Tariff agreement relating to lower heating value within 30 days | -- |
| | SO ₂ | No controls installed | -0.07 lbs/hr per engine -0.8% fuel sulfur content | -- -Copy of that part of FERC-approved Tariff agreement where sulfur content is <0.8% by weight | -- -Any change in Tariff agreement relating to sulfur content of fuel within 30 days | -- |
| | NO _x | No controls installed | 24.34 lbs/hr per engine | Maintain and operate engines in accordance with the manufacturer's specification. Copies of emissions related maintenance requirement on each IC engine | Annual test results within 30 days of testing | Test all engines before the first anniversary date. Annual test on one engine specified by the Department on a rotational basis. EPA Method 20 |
| | CO | No controls installed | 30.43 lbs/hr per engine | Maintain and operate engines in accordance with the manufacturer's specification. Copies of emissions related maintenance requirement on each IC engine | Annual test results within 30 days of testing | Test all engines before the first anniversary date. Annual test on one engine specified by the Department on a rotational basis. EPA Method 10 |
| | NMHC (VOC) | No controls installed | 6.09 lbs/hr per engine | Maintain and operate engines in accordance with the manufacturer's specification. Copies of emissions related maintenance requirement on each IC engine | Test results within 30 days of testing | Test each engine only once Method 25A |

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|---|--------------------|-----------------------|---|--|---|--|
| | HAPs | No controls installed | ** | Maintain and operate engines in accordance with the manufacturer's specification. Copies of emissions related maintenance requirement on each IC engine | -- | -- |
| | Opacity | No controls installed | < 10% per engine, except for the first 10 minutes after cold starting | Record monthly opacity readings. If compliance is determined for the first 6 months, then record semiannually | Report opacity readings along with semiannual certifications | -- Method 9 |
| | Other requirements | - | <31890 scf/hr of natural gas combustion per engine | -Record hourly usage of natural gas -Record daily hours of turbine operation | Report monthly totals of amount of natural gas combusted and monthly totals of hours of turbine operation along with semiannual certification | -- |
| P4.* Natural gas-fired Caterpillar reciprocating engine Stack 4 OR P5.* Natural gas-fired Caterpillar reciprocating engine Stack 4 (Fuel -Natural Gas) [R18-2-719] *Only one engine is permitted to operate except at those periods when units are being switched | PM | No controls installed | $E = 1.02 Q^{0.769}$ lb/hr per engine | Daily lower heating value of fuel OR Maintain copy of that part of FERC-approved Tariff agreement where gross heating value should be greater than 970 BTU/cubic foot. | Any change in Tariff agreement relating to lower heating value within 30 days | -- |
| | SO ₂ | No controls installed | -0.02 lb/hr per engine -0.8% fuel sulfur content | -- -Copy of that part of FERC-approved Tariff agreement where sulfur content is limited to < 0.8% by weight | -- | -- |
| | NO _x | No controls installed | 6.39 lb/hr per engine | Maintain and operate engines in accordance with the manufacturer's specification. Copies of manufacturer's emissions related maintenance requirement on each IC engine | Annual test results within 30 days of testing | Test all engines before the first anniversary date. Annual test on one engine specified by the Department on a rotational basis. Method 20 |

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|--|----------------------------------|---|--|--|---|--|
| | CO | No controls installed | 9.58 lb/hr per engine | Maintain and operate engines in accordance with the manufacturer's specification. Copies of manufacturer's emissions related maintenance requirement on each IC engine | Annual test results within 30 days of testing | Test all engines before the first anniversary date. Annual test on one engine specified by the Department on a rotational basis. Method 10 |
| | NMHC (VOC) | No controls installed | 3.19 lbs/hr per engine | Maintain and operate engines in accordance with the manufacturer's specification. Copies of manufacturer's emissions related maintenance requirement on each IC engine | Test results within 30 days of testing | One test for each engine Method 25A |
| | HAPs | No controls installed | ** | Maintain and operate engines in accordance with the manufacturer's specification. Copies of manufacturer's emissions related maintenance requirement on each IC engine | -- | -- |
| | Opacity | No controls installed | < 10 % except for the first 10 minutes after cold starting | Record monthly opacity readings If compliance is determined for the first 6 months, then record semiannually | Report opacity readings along with semiannual certifications | -- Method 9 |
| | Other limits | - | 10,826 scf/hr of natural gas fuel combusted | -Record hourly usage of natural gas -Record daily hours of turbine operation | Report monthly totals of amount of natural gas combusted and monthly totals of hours of turbine operation during semiannual certification | -- |
| P6 & P7 Two Additional Engines | NOx, SO2, CO,NMHC, HAPs, Opacity | Review BACT within 18 months prior to installation and submit along with an application for significant revision to include new BACT emission limits, monitoring and recording keeping requirements | | | | |
| <u>FUGITIVE SOURCES</u> | | | | | | |
| F1. <i>Non-Point Sources</i> <i>1. Driveways, parking areas, vacant lots</i> [A.A.C. R18-2-604.A,610] | Opacity | Gravel | <40% | Maintain existing gravel areas and record dates when new gravel is added | -- | -- |

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|---|---------|---|-------|--|----|----|
| 2. <i>Unused open areas</i> [A.A.C. R18-2-604.A,610] | Opacity | Natural Vegetation | <40% | Record dates when fresh vegetation is added | -- | -- |
| 3. <i>Open areas</i> [A.A.C. R18-2-604.A,610] | Opacity | Dust suppressants, wetting agents | <40% | Record date and type of activity performed and type of control(s) used | -- | -- |
| 4. <i>Construction of roadways</i> [A.A.C. R18-2-605.A,610] | Opacity | Dust suppressants, wetting agents, paving | <40% | Record date and type of activity performed and type of control(s) used | -- | -- |
| 5. <i>Material transportation</i> [A.A.C. R18-2-605.B, 610] | Opacity | Dust suppressants, wetting agents, covering | <40% | Record date and type of activity performed and type of control(s) used | -- | -- |
| 6. <i>Material handling</i> [A.A.C. R18-2-606, 610] | Opacity | Dust suppressants, wetting agents, spray bars | <40% | Record date and type of activity performed and type of control(s) used | -- | -- |
| 7. <i>Storage piles</i> [A.A.C. R18-2-607.A,610] | Opacity | Dust suppressants, wetting agents, covering | <40% | Record date and type of activity performed and type of control(s) used | -- | -- |
| 8. <i>Stacking and reclaiming machinery at storage piles</i> [A.A.C. R18-2-607.B, 610] | Opacity | Minimum fall, dust suppressants, wetting agents | <40% | Record date and type of activity performed and type of controls used | -- | -- |
| 9. <i>Roadway and site cleaning</i> [A.A.C.R18-2-607.B, 610] | Opacity | Dust suppressants, wetting agents | < 40% | Record date and type of activity performed and type of control(s) used | -- | -- |
| F2. <u>Abrasive Blasting</u> [R18-2-702.B,726] | Opacity | Wet blasting or effective enclosures with dust collecting equipment | <40% | Record date and type of project and control measure(s) used | -- | -- |

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|--|----------|---------------------|--|---|----|----|
| F3. <u>Use of Paints</u> [R18-2-702.B, 727, applicable SIP R9-3- 527.C] | VOC | Enclosures | 96% capture, except for architectural or spot painting, dispose <1.5 gallons/day of photochemi- cally reactive solvent(PCRS) No usage of PCRS for ar- chitectural coatings | -Record date & duration of project & control measure(s) used -Maintain copies of MSDS of paints used (except for architectural or spot painting) | -- | -- |
| | Opacity | Not required | <40% | -- | -- | -- |
| F4. <u>Mobile Sources</u> <i>a. Off road machinery</i> [A.A.C. R18-2-801,802] | Opacity | Not required | <40% | Record & maintain all vehicular emission related maintenance stationed at the facil- ity | -- | -- |
| <i>b. Roadway and site cleaning machinery</i> [A.A.C. R18-2-801,804.A] | Opacity | Not required | <40% | Record all emission related maintenance activities performed on Permittee's off- road machinery stationed at the facility | -- | -- |
| F5. <u>Demolition/Renovation</u> [R18-2-1101.A8] | Asbestos | As required by rule | As required by rule | Maintain relevant paperwork on file | -- | -- |
| F6. <u>Open Burning</u> [A.A.C R18-2-602] | Opacity | As required by rule | As required by burn permit | Maintain copy of open burn permit prior to conducting an open burn | - | -- |

(1) Semiannual Compliance Certifications required for all permitted equipment

-- Not required

** No limits established

NOTE: HAPs are emitted in trace quantities

ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 1000194

For

MOJAVE PIPELINE OPERATING COMPANY - Topock Compressor Station

I. PERMIT EXPIRATION AND RENEWAL

[A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2 and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

[A.A.C. R18-2-306.A.8]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[A.A.C. R18-2-306.A.8.c, 321]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
 - 1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.
 - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

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3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Section III.B.1 of this attachment shall not result in a resetting of the five year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
1. Current permit number.
 2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT

[A.A.C. R18-2-326; 306.A.9.]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.c & 306.A.5]

- A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than April 15th, and shall report the compliance status of the source during the period between September 16th of the previous year and March 15th of the current year. The second

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certification shall be submitted no later than October 15th, and shall report the compliance status of the source during the period between March 16th and September 15th of the current year.

The compliance certification shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
 2. Compliance status of each applicable requirement;
 3. Whether compliance was continuous or intermittent;
 4. Method(s) used for determining the compliance status of the source, currently and over the reporting period.
 5. All instances of deviations from permit requirements reported pursuant to Section XI.B of this Attachment; and
 6. A progress report on all outstanding compliance schedules submitted pursuant to Section XI.C of this Attachment.
- B. A copy of all compliance certification for Class I permits shall also be submitted to the EPA Administrator.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

[A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY

[A.A.C. R18-2-309.4]

The permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. PERMIT DEVIATION REPORTING

A. EXCESS EMISSIONS REPORTING

[A.A.C. R18-2-306.A.5.b, 306.E.3.d and 310]

1. Emissions in excess of an applicable emission limitation contained in Section I of Attachment "B", of this permit shall constitute a violation. For all situations that constitute an emergency as defined in R18-2-306(E), the affirmative defense and reporting requirements contained in that provision shall apply.
2. It shall be the burden of the Permittee to demonstrate, through submission of the data and information required by this section, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of excess emissions.
3. Excess emissions shall be reported as follows:
 - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
 - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
 - b. Report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred.
 - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) Date, time and duration or expected duration of the excess emissions.
 - (4) Identity of the equipment from which the excess emissions emanated.

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- (5) Nature and cause of such emissions.
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
 - (7) Steps taken to limit the excess emissions. If the source's permit contains procedures governing source operation during periods of start-up or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.
- 4. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.3.a.(2) of this Section.
- 5. EMERGENCY PROVISION [A.A.C. R18-2-306.E]
 - a. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - b. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph d of this section are met.
 - c. The Permittee shall submit notice of the emergency to the Director by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
 - d. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;

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- (3) During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) The notice was submitted per paragraph c. above.
 - e. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - f. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
- B. OTHER PERMIT DEVIATIONS [A.A.C. R18-2-306.A.5 and 6, 306.E.3.d.]

Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.
- C. For any episode of non-compliance that is reported pursuant to XI.A and XI.B above, and that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

XII. RECORD KEEPING REQUIREMENTS

[A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;
 - 3. The name of the company or entity that performed the analyses;
 - 4. A description of the analytical techniques or methods used;
 - 5. The results of such analyses; and
 - 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIII. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

Permittee shall submit the following reports :

1. Compliance certifications in accordance with Section VII of Attachment “A”.
2. Permit deviation reports in accordance with Section XI of Attachment “A”.
3. Other reports required by Section III of Attachment “B”.

XIV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XV. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319);
- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT PERMIT REVISION

[A.A.C. R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
 1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.

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4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and © of this Section.
- C. For each such change under subsections A and B of this Section a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change as but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible.

Each notification shall include:

1. When the proposed change will occur.
2. A description of each such change.
3. Any change in emissions of regulated air pollutants.
4. The pollutants emitted subject to the emissions trade, if any.
5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
7. Any permit term or condition that is no longer applicable as a result of the change.

XVII. TESTING REQUIREMENTS

[R18-2-312]

A. **Operational Conditions During Testing**

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during startup, shutdown, and malfunctions (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

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B. Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

C. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

D. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs.

E. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

F. Cessation of Testing After the First Run has Started

If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

XVIII. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XIX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

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The provisions of this permit are severable, if any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

XX. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment.

Mojave Pipeline Operating Company - Topock Compressor Station

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 1000194

For

Mojave Pipeline Operating Company - Topock Compressor Station

I. EMISSION LIMITS/ STANDARDS

A. Natural Gas Fired Caterpillar Reciprocating Engines (2)

Except during periods of switching, Permittee shall not operate more than one Caterpillar reciprocating engine at any given time.

[Installation Permit #1231]

B. Natural Gas Fired Cooper Bessemer (C-B) Reciprocating "clean burn" IC Engines (3) & Natural Gas Fired Caterpillar Reciprocating Engines (2)

1. Particulate Matter (PM)

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any of the three (3) Cooper Bessemer natural gas-fired reciprocating engines or either of the two Caterpillar natural gas-fired reciprocating engines in excess of the limits calculated by the following equation:

$$E = 1.02 Q^{0.769} \text{ where:}$$

E=the maximum allowable particulate emissions rate in pounds-mass per hour.

Q= the heat input in million Btu per hour.

[A.A.C. R18-2-719.C.1]

2. Opacity

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any of the Cooper Bessemer reciprocating engines or the Caterpillar reciprocating engines any gases which exhibit greater than 10 percent opacity measured in accordance with the Arizona Testing Manual, Reference Method 9. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[Installation Permit # 1231]

3. Nitrogen Oxides (NO_x)

Permittee shall not cause, allow, or permit to be emitted into the atmosphere from each reciprocating engine, emissions of nitrogen oxides in excess of the following limits:

Cooper Bessemer reciprocating "clean burn" IC engine: 24.34 pounds per hour

Caterpillar reciprocating engine: 6.39 pounds per hour

[Installation Permit #1231]

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4. Carbon monoxide (CO)

Permittee shall not cause, allow, or permit to be emitted into the atmosphere from each reciprocating engine, emissions of carbon monoxide in excess of the following limits:

Cooper Bessemer reciprocating "clean burn" IC engine: 30.43 pounds per hour

Caterpillar Reciprocating engine: 9.58 pounds per hour

[Installation Permit #1231]

5. Sulfur dioxide (SO₂) and Fuel Sulfur Content

a. Permittee shall not cause, allow or permit to be emitted into the atmosphere from each reciprocating engine, any gases which contain sulfur dioxide emissions in excess of the following limits:

Cooper Bessemer reciprocating "clean burn" IC engine: 0.07 pounds per hour

Caterpillar reciprocating engine: 0.02 pounds per hour

[Installation Permit #1231]

b. Permittee shall limit the sulfur content in the fuel to less than 0.8 percent by weight.
[R18-2-719.J]

6. Non-Methane Hydrocarbon (NMHC)

Permittee shall not cause, allow or permit to be emitted into the atmosphere from each reciprocating engine, any gases which contain non-methane hydrocarbon emissions in excess of the following limits:

Cooper Bessemer reciprocating "clean burn" IC engine: 26.67 pounds per hour

Caterpillar reciprocating engine: 13.97 pounds per hour

[Installation Permit 1231]

7. Fuel Limitation

a. Permittee shall limit the combustion of natural gas fuel in each reciprocating engine to less than that specified in the following limits:

Cooper Bessemer reciprocating "clean burn" IC engine:

31, 890 standard cubic feet per hour

Caterpillar reciprocating engine: 10,862 standard cubic feet per hour

[Installation Permit 1231]

b. Permittee shall combust only pipeline quality natural gas in all the fuel-burning engines.
[R18-2-306.A]

C. Two Additional Engines

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Permittee shall review and modify Best Available Control Technology (BACT), as approved by the Director, as appropriate at the latest reasonable time which is no later than 18 months prior to commencement of construction. An application for a significant revision shall be submitted for incorporation of the new emission limits. [A.A.C. R18-2-406.A.3]

D. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

- a. Visible emissions from open areas, roadways, streets, storage piles, or material handling shall not have an opacity greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C.R18-2-610]
- b. Permittee shall employ the following methods to prevent excessive amounts of particulate matter from becoming airborne:
 - (1) Continue to maintain or if necessary, add new gravel on driveways, parking areas, and vacant lots where motor vehicular activity occurs; [A.A.C.R18-2-604.A]
 - (2) Maintain native vegetation on any unused open areas within the property fence line; [A.A.C.R18-2-604.A]
 - (3) Use adequate dust suppressants or wetting agents on open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated; [A.A.C.R18-2-604.A]
 - (4) Use adequate dust suppressants or wetting agents when a roadway is repaired, constructed, or reconstructed; [A.A.C.R18-2-605.A]
 - (5) Use dust suppressants, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust; [A.A.C.R18-2-605.B, 606]
 - (6) Use spray bars, wetting agents or dust suppressants when crushing, handling, or conveying material that is likely to give rise to airborne dust; [A.A.C.R18-2-606]
 - (7) Adequately cover, or use wetting agents or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing materials; [A.A.C.R18-2-607.A]
 - (8) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and with the use of spray bars and wetting agents; and [A.A.C.R18-2-607.B]
 - (9) Cleaning of any site, roadway, or alley without first applying dust suppressants or wetting agents. Earth or other material shall be removed from paved

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streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means. [A.A.C.R18-2-804.B]

2. *Open Burning*

Permittee shall not conduct open burning except when permitted to do so by either ADEQ or the local officer in charge of issuance of open burn permits.

[A.A.C.R18-2-602]

E. Other Periodic Activities

1. *Abrasive Blasting*

[A.A.C. R18-2-726]

- a. Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

- (1) wet blasting; and
- (2) effective enclosures with necessary dust collecting equipment.

- b. Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B]

2. *Use of Paints*

While performing spray painting operations, the Permittee shall comply with the following requirements:

- a. Shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the over spray.

[A.A.C.R18-2-727.A]

- b. Permittee or his designated contractor shall not either:

- (1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
- (2) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C.R18-2-727.B]

- c. For the purposes of parts b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (1) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones : 5 percent
 - (2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent
 - (3) A combination of ethylbenzene, ketones having branched structures, trichloroethylene or toluene: 20 percent [A.A.C.R18-2-727.C]
 - d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents. [A.A.C.R18-2-727.D]
 - e. Shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day. [SIP Provision R9-3-527.C]
 - f. Visible emissions from spray painting operations shall not have an opacity greater than 40%, as measured by EPA Reference Method 9. [A.A.C.R18-2-702.B]
3. *Mobile Sources*
- a. Classification

The requirements of this condition are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or are agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.84. [A.A.C.R18-2-801]
 - b. Off-road Machinery

Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway. [A.A.C.R18-2-802]
 - c. Roadway and Site Cleaning Machinery

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions

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when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C.R18-2-804.A]

4. *Demolition/Renovation*

Permittee shall comply with all of the applicable requirements of 40 CFR 61, Subpart M: National Emissions Standards for Hazardous Air Pollutants - Asbestos). [A.A.C.R18-2-1101.A.8]

5. *Nonvehicle Air Conditioner Maintenance and/or Services*

The Permittee shall comply with all of the requirements of 40CFR 82, Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction). [40 CFR Subpart 82]

II. MONITORING AND RECORD KEEPING REQUIREMENTS

[A.A.C.R18-2-306]

A. Natural Gas Fired Cooper Bessemer Reciprocating "clean burn" IC Engines (3) & Natural Gas Fired Caterpillar Reciprocating Engines (2)

1. Particulate Matter and Fuel Sulfur Content

Permittee shall monitor daily the sulfur content and lower heating value of the fuel being combusted in the stationary reciprocating gas engines. This requirement may be complied with by maintaining a copy of that part of FERC-approved Tariff agreement which limits transmission of pipeline quality natural gas of sulfur content less than 0.8 percent by weight and having a heating value greater than or equal to 967 Btu/ft³.

[A.A.C.R18-2-719.I]

2. Sulfur dioxide and Non-Methane Hydrocarbon

Permittee shall maintain copies of emission related maintenance records performed on the reciprocating engines. [A.A.C.R18-2-306.2]

3. Nitrogen Oxides and Carbon monoxide

a. Permittee shall maintain the engines in accordance with the turbine manufacturer's specification. Permittee shall maintain copies of emission related maintenance records performed on the reciprocating engines. [A.A.C.R18-2-306.A.2]

b. Permittee shall conduct performance tests mentioned in Section IV.A.1 of this permit to verify compliance with the limits specified in Section I.B.3., & 4. of this Attachment. [A.A.C.R18-2-311]

4. Opacity

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Permittee shall log in ink, opacity readings conducted once every month on all the 5 engines using EPA Reference Method 9. If compliance is determined for the first 6 months, then the frequency can be reduced to semiannually.

[A.A.C.R18-2-306.2]

5. Fuel Amount

Permittee shall record on an hourly basis the amount of fuel combusted in each Cooper Bessemer and Caterpillar engine except during periods of routine maintenance and calibration of the fuel meter or periods of switching between the Caterpillar engines. This record may be kept in an electronic format as long as such records are in a format that cannot be altered or modified after recording. Permittee shall provide a timetable to the Director within 90 days after permit issuance for the development and installation of an electronic recordkeeping system that cannot be altered or modified after recording.

[A.A.C.R18-2-306.2]

B. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles and Material Handling

Permittee shall maintain records of the following:

- a. Dates gravel maintenance activities are performed in order to comply with the requirements of I.C.1.b.(1).
- b. Dates on which fresh vegetation is introduced as required.
- c. Dates on which any of the activities listed in I.C.1.b.(3) are performed, and control measures adopted.
- d. Dates on which any of the activities listed in I.C.1.b.(4) are performed, and control measures adopted.
- e. Dates on which the activity listed in I.C.1.b.(5) is performed, and control measures adopted.
- f. Dates on which any of the activities listed in I.C.1.b.(6) are performed, and control measures adopted.
- g. Dates on which any of the activities listed in I.C.1.b.(7) are performed, and control measures adopted.
- h. Dates on which any of the activities listed in I.C.1.b.(8) are performed, and control measures adopted.
- i. Dates on which any of the activities listed in I.C.1.b.(9) are performed, and control measures adopted.

2. *Open Burning*

Permittee shall obtain and maintain on file an open burn permit prior to conducting an open burn.

C. Other Periodic Activities

1. *Abrasive Blasting*

Each time an abrasive blasting project is conducted, Permittee shall log in ink, a record of the following:

- a. The date the project was conducted;
- b. The duration of the project; and
- c. The type of control measures employed.

2. *Use of Paints*

- a. Each time a spray painting project is conducted, Permittee shall log in ink or an electronic format, a record of the following:

- (1) The date the project was conducted;
 - (2) The duration of the project;
 - (3) The type of control measures employed; and
 - (4) Material Safety Data Sheets (MSDS) for all paints and solvents used in the project.

- b. Architectural coating and spot painting shall be exempt from the record keeping requirements of part a. above.

3. *Mobile Sources*

Permittee shall keep a record of all emission related maintenance activities performed on Permittee's mobile sources as per manufacturers specifications.

4. *Demolition/Renovation*

As a means of demonstrating compliance with condition I.D.4 of this Attachment, Permittee shall keep a record of all relevant paperwork on file. The relevant paperwork shall include but not be limited to the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents.

5. *Nonvehicle Air Conditioner Maintenance and/or Services*

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As a means of demonstrating compliance with condition I.E.5 of this Attachment, the Permittee shall keep a record of all paperwork relevant to the requirements of 40 CFR 82-Subpart F shall be kept on file.

D. Location of Records

Permittee shall retain all records relating to this permit, and a copy of the permit at the Topock Compressor Station. The Permittee shall comply with the permit posting requirements of Section IV., Attachment "A". Except for those records kept in an electronic format, all other records shall be maintained in a log and in accordance with the requirements of Section XII.B of Attachment "A".

III. REPORTING REQUIREMENTS

- A. Permittee shall submit a report of the revised BACT analysis along with an application for significant revision for installation of the two engines.
- B. Permittee shall notify the Director in writing within 30 days of any changes to that part of FERC-approved Tariff agreement relating to the fuel sulfur content and lower heating value limits that occur during the term of this permit.
- C. Permittee shall submit compliance certifications pursuant to Section VII of Attachment "A".
- D. Along with the compliance certifications submitted pursuant to Section VII of Attachment "A", Permittee shall submit reports of opacity readings, monthly amount of fuel combusted in each engine, and hours of operation of each reciprocating engine.
- E. Permittee shall submit reports of annual performance test conducted on the engines within 30 days of conducting the test.
- F. Permittee shall provide a timetable to the Director within 90 days after permit issuance for the development and installation of an electronic recordkeeping system that cannot be altered or modified after recording.
- G. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities required by Section II of this Attachment performed in the six months prior to the date of the report.

IV. TESTING REQUIREMENTS

- A. **Natural Gas Fired Cooper Bessemer Reciprocating "clean burn" IC Engines (3) & Natural Gas Fired Caterpillar Reciprocating Engines**
 - 1. Permittee shall conduct performance tests to determine the emissions of nitrogen oxides and carbon monoxide from all the engines mentioned above within the first anniversary of the issuance of this permit. Based on the results of these tests, the Department shall specify the units to be tested annually in the remaining term of the permit on a rotational basis. Units chosen for rotational testing shall be such that all the units are tested at least once during the

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permit term. Each annual test shall be completed prior to each anniversary date of this permit issuance. Test methods specified in section IV.B. of this Attachment shall be used.

2. During the term of this permit, Permittee shall also conduct one performance test on each engine to determine the emissions of non-methane hydrocarbons. Test method specified in section IV.B. of this Attachment shall be used.

B. Test Methods

Permittee shall use the following EPA approved Reference test methods to conduct performance tests for pollutants specified:

1. Nitrogen Oxides: EPA Reference Method 20.
2. Carbon Monoxide: EPA Reference Method 10.
3. Opacity: EPA Reference Method 9.
4. Non-Methane Hydrocarbons: Method 25A.
5. Sulfur Dioxide: Method 20.

Permittee may submit an alternate and equivalent test method(s) that is listed under 40 CFR 60, Appendix A to the Director in any test plan for approval by the Director.

ATTACHMENT "C": APPLICABLE REGULATIONS

Air Quality Control Permit No. 1000194

For

Mojave Pipeline Operating Company - Topock Compressor Station

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NON POINT SOURCES

| | |
|---------------|--|
| R18-2-602 | Unlawful open burning |
| R18-2-604.A&B | Open areas, dry washes, or riverbeds |
| R18-2-605 | Roadways and streets |
| R18-2-606 | Material handling |
| R18-2-607 | Storage piles |
| R18-2-610 | Evaluation of NON POINT source emissions |

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

| | |
|----------------|---|
| R18-2-719.C.1 | Standards of performance for existing stationary rotating machinery |
| R18-2-719.E | Standards of performance for existing stationary rotating machinery |
| R18-2-726 | Standards of performance for sandblasting operations |
| R18-2-727 | Standards of performance for spray painting operations |
| SIP R9-3-527.C | Standards of performance for spray painting operations |

ARTICLE 8: EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

| | |
|-----------|-------------------------------------|
| R18-2-801 | Classification of mobile sources |
| R18-2-802 | Off-road machinery |
| R18-2-804 | Roadway and site cleaning machinery |

ARTICLE 11. FEDERAL HAZARDOUS AIR POLLUTANTS

| | |
|----------------|--|
| R18-2-1101.A.8 | National Emission Standards for Hazardous Air Pollutants (NESHAPs), (by reference) 40 CFR 61, Subpart M - Asbestos |
|----------------|--|

CODE OF FEDERAL REGULATIONS, TITLE 40

| | |
|--------------------|-----------------------------------|
| Part 82, Subpart F | Recycling and Emissions Reduction |
|--------------------|-----------------------------------|

INSTALLATION PERMIT 1231

| | |
|----------------|----------------------------------|
| Attachment "B" | Special Conditions |
| Attachment "C" | Maximum Allowable Emission Rates |

REQUIREMENTS SPECIFICALLY IDENTIFIED AS NOT APPLICABLE

As requested by the Permittee, specific non-applicable requirements have been identified as follows. A permit shield is granted from these requirements.

| | |
|-----------|--|
| R18-2-703 | Standards of Performance for Existing Fossil-Fuel Fired Steam Generators and General Fuel-Burning Equipment. |
|-----------|--|

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R18-2-724 Standards of Performance for Fossil-Fuel Fired Industrial and Commercial Equipment.
R18-2-901.39 Subpart GG - Stationary Gas Turbines

ATTACHMENT "D": PERMITTED EQUIPMENT LIST

Air Quality Control Permit No. 1000194

For

Mojave Pipeline Operating Company - Topock Compressor Station

| Emission Unit # | Emission Unit ID | Description | Size* | Serial Number | Model | Date of Manufacture / Installation |
|-----------------|--|---|----------|---------------|---------|------------------------------------|
| P1 | CP#1 | Natural gas-fired COOPER/BESSEMER reciprocating engine | 4080 bhp | 49094 | 8W330 | June 3, 1991 |
| P2 | CP#2 | Natural gas-fired COOPER/BESSEMER reciprocating engine | 4080 bhp | 49095 | 8W330 | June 18, 1991 |
| P3 | CP#3 | Natural gas- fired COOPER/BESSEMER reciprocating engine | 4080 bhp | 49096 | 8W330 | July 19, 1991 |
| P4** | CAT#1 | Natural gas-fired CATERPILLAR reciprocating engine | 1500 bhp | 3XF00019 | 3606 SI | June 12, 1991 |
| P5** | CAT#2 | Natural gas-fired CATERPILLAR reciprocating engine | 1500 bhp | 3XF00020 | 3606 SI | July 31, 1991 |
| P6 | To be determined after new BACT analysis | | | | | |
| P7 | To be determined after new BACT analysis | | | | | |
| F1 | Misc | Non-point Sources | - | - | - | - |
| F2 | Misc | Abrasive Sandblasting | - | - | - | - |
| F3 | Misc | Spray Painting | - | - | - | - |
| F4 | Misc | Mobile Sources | - | - | - | - |
| F5 | Misc | Demolition/ Renovation | - | - | - | - |

*Site horsepower @ 75°F; Site Elevation is approximately 634 feet. For Cooper Bessemer units, summer time siter rated hp is 4080 bhp with an evaporatively cooled inlet air temperature of 75oF, and the winter site-rated hp is 4640 hp at an evaporatively cooled inlet air temperature of 40oF. The Caterpillar unit rated hp is 1500 at 1118.5KW and 900 RPM.

** Only one generator is permitted to be operated at any given time except during those times of unit switching

ATTACHMENT "E": INSIGNIFICANT ACTIVITIES
Air Quality Control Permit No. 1000194
FOR
Mojave Pipeline Operating Company - Topock Compressor Station

| POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54 | |
|---|--|
| S. No. | Description |
| 1 | Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets used only for emergency replacement or standby service. |
| 2 | Petroleum-based solvent tanks less than 10,000 gallons (solvent with a vapor pressure less than gasoline.) |
| 3 | Lube oil storage tanks. |
| 4 | Minor natural gas-fired appliances, in the aggregate rated less than 500,000 BTU/hr (such as hot water heaters, HVAC, etc.) |
| 5 | Temporary hydrostatic test water evaporation ponds. |
| 6 | Pressure tanks. |
| 7 | Used oil systems. |
| 8 | General maintenance of regulated emissions units, including, but not limited to, oil filter replacement (including drainage of oil filters), and work on the engine jacket water system. |
| 9 | Fan systems. |
| 10 | Maintenance and use of inertial separators (to filter air intake into the gas turbine engines.) |
| 11 | Exercise of standby equipment. |
| 12 | Domestic wastewater systems. |
| 13 | Plant water and wastewater system. |
| 14 | Emergency shut down system and pressure relief valves. |
| 15 | Blowdown activities during startup and shutdown of reciprocating engines. |
| 16 | Scrubber liquid systems. |
| 17 | Oil/water separator systems. |
| 18 | Cathodic protection system. |
| 19 | Vents, valves, and flanges. |
| 20 | Solvent degreasing. |
| 21 | Cooling water systems. |
| 22 | General plant maintenance, construction, and upkeep activities not associated with the Permittee's primary business activity, and not otherwise triggering a permit modification. |
| 23 | Manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, or wood . |
| 24 | Use of consumer office products. |
| 25 | Use and maintenance of electric driven equipment for general location maintenance including but not limited to a bench grinder, drill press, pipe threader, and lathe. |

Mojave Pipeline Operating Company - Topock Compressor Station

| | POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54 |
|--------|---|
| S. No. | Description |
| 26 | Steam cleaning activities. |
| 27 | Welding activities. |
| 28 | Laboratory equipment. |
| 29 | Safety equipment. |
| 30 | Uninterruptable power supply systems. |
| 31 | Utility pumps and systems. |
| 32 | Use of chlorination systems. |